

IN THE SPECIFICATION:

Please replace the paragraph beginning on page 47, line 8 with the following new paragraph:
FIGURE 45B is a cross sectional view taken generally along line 45B-45B of FIGURE ~~[[45]]~~
45A;

Please replace the paragraph beginning on page 47, line 9 with the following new paragraph:
FIGURE 45C is a cross sectional view taken generally along line 45C-45C of FIGURE ~~[[45]]~~
45A; and,

Please replace the paragraph beginning on page 65, line 5 with the following new paragraph:
Referring now to FIGURE 30, there is an illustration of a portion of induction heating coil 800 positioned about the cavity into which the hollow metal blank F is to be formed. Heating coil 800 is positioned in fill material 806 a distance d1 from the inner surface of the cavity or shell 804. A second induction heating coil 802 is positioned about the cavity a distance d2 from the inner surface of the cavity or shell 804, which distance is greater than d1. As previously discussed with respect to FIGURES 27-28B, the closer the coils are to the metal constituting the metal blank, the greater the heating effect provided by the coils. When the coils are positioned close to the inner surface of the cavity or shell, a large heat gradient is formed between the heated metal body and the coils. This large heat gradient can result in thermal shock to cavity or shell 804 which can result in damage to the cavity or shell thereby reduce the life of the cavity or shell. Thermal shock to the cavity or shell can be reduced by moving the coils ~~father~~ farther from the inner surface of the cavity or shell; however, increased heating times of the metal blank typically result from such positioning of the coils. One arrangement for overcoming such increased heating times is by the use of flux concentrators. As illustrated in FIGURE 30, flux concentrator 810 is used in conjunction with coils 802 to increase the coupling efficiency of the coils. The flux concentrator can also be used to vary the inductive current path along one or more portions of the length of an induction heating coil, thus achieving tailored heating profiles of a metal blank within the die during the forming process. As such the differing distance of the coils 800 and 802 from the inner surface of cavity or shell 804 can be used to vary the heating profile of metal blank F. The use of the flux concentrator in conjunction with coils 802 adds further control of the heating profile of the metal blank.

Please replace the paragraph beginning on page 68, line 28 with the following new paragraph:

Referring now to FIGURE 36, there is an illustration of electrical heating arrangement for metal blank K that is to be formed in a die. An induction coil 1000 is illustrated as encircling the metal blank. A power source 1010 is used to energize the ~~indication~~ induction coil used to heat the metal blank during the forming of the metal blank in a die. Several capacitors 1020, 1030, 1040, 1050 are connected to the induction coil. The capacitors are used to tailor the heating profile of the metal blank during the forming process. The capacitors are use to adjust the energy distribution axially along one or more of the induction coils by capacitor shunting appropriate sections of the induction coils. This can be done statically or can be arranged to be done dynamically during the heating operation. As is illustrated in FIGURE 36, the capacitor shunting can be along any portion of the induction coil and/or can be done for one or more induction heating coils in a die. Switches S are used to capacitor shunting one or more sections of the induction coil. One or more switches can be manually and/or automatically activated and/or deactivated. One or more switches can be activated and/or deactivated in a controlled (e.g., program sequence, time sequence, temperature dependent, time dependent, etc.) or in a random manner.

Please replace the paragraph beginning on page 71, line 9 with the following new paragraph:

Referring now to FIGURES 40-43B, several non-limiting examples of tailored metal blanks are illustrated which can be used in the present invention. As can be appreciated, the examples are merely representative of some of the many types of tailored metal blanks that can be used in the present invention. The shape of the tailored metal blank can take any number of forms. The final form will typically depend of the shape of the desired final product. The materials used to form the tailored metal blank can be uniform or be varied throughout one or more portions of the metal blank. The metal blank can be formed by two or more pieces of material. Typically, these pieces of material are connected together by a weld; however, other connection mechanisms can be used, such as brazing, adhesive, bolting, and/or the like. The thicknesses of one or more portions of the metal blank can also be varied in one or more regions of the metal blank. Referring to FIGURE 40, the is illustrated a single sheet of metal material (e.g., carbon steel, stainless steel, aluminum, etc.) having a generally trapezoidal shape 1300. The sheet of metal is rolled and then the edges are welded together by a weld 1310 to form a generally conically shaped metal blank 1320. Referring

now to FIGURE 41, another tailored blank is illustrated wherein two tubular metal components 1350, 1360 are connected together by a weld 1370 to form a metal blank 1380 having ~~[[to]]~~ two distinct diameters. The two tubular metal components can be made of the same or a different metal. Tubular metal component 1360 is shown to be longer than tubular metal component ~~1370~~ 1350; however, the two tubular metal components can have the same length or tubular metal component ~~1370~~ 1350 can be longer than tubular metal component 1360. The thickness of the metal used to form the two tubular metal components can be the same or different. Referring now to FIGURES 42A-42C, another tailored blank is illustrated wherein the metal blank is formed from two sheets of metal 1400, 1410. Metal sheet 1400 is shown to be formed from three metal components 1402, 1404, 1406, each having a different shape. The metal components can be formed of the same or different material. The metal components can have the same or different thicknesses. As shown in FIGURE 42B, the metal components are welded together by weld 1420. Metal sheet 1410 is illustrated as being formed of a single sheet of metal; however, it can be appreciated that the metal sheet can be form from a plurality of metal components. As shown in FIGURE 42B, metal sheets 1400, 1410 are connected together at their respective edges to form the metal blank. Typically a weld 1430 is used to connect the edges together. FIGURE 42C illustrates the metal blank after it has been expanded into a structural component 1440. The structural component can be finished, if desired, by cutting and/or further mechanical bending of the structural component. As shown in FIGURE 42C, an end 1450 of the structural component is cut off after the metal blank has been expanded. As can be appreciated, other modifications to structural component 1440 can be made, if desired, prior to the formation of the final product. Referring now to FIGURE 43A and 43B, another tailored made metal blank is shown. The metal blank 1500 is formed from two metal sheets 1510, 1520 that are welded together by weld 1530. The two sheets of metal can be formed of the same metal or be a different metal. The two sheets of metal can have the same or a different thickness. Metal sheets 1510, 1520 are illustrated as being formed of a single sheet of metal; however, it can be appreciated that one or more of the metal sheets can be form from a plurality of metal components. FIGURE 43B illustrates the prebending of metal blank 1500 prior to being expanded in the die. The prebending is typically performed by standard mechanical bending techniques (hydraulic press, etc.). As illustrated in FIGURE 43B, various types of prebending can be performed on one or more portions of the metal blank. The prebending of the metal blank is used to facilitate in the formation of the final structural product in the die. After the metal blank has been

expanded in the die, the structural component can undergo one or more finishing steps as illustrated and discussed above with respect to FIGURE 42C.